

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Original): A dual function handlebar mounted actuator including means for operating a first function and means for operating a second function, said first and second function operating means being arranged for activation by movement of a hand operated lever arrangement and wherein said first and second function operating means are linked so that a combined first and second function can be activated.

Claim 2 (Currently amended): A dual function handlebar mounted actuator according to claim 1, wherein said first and said second functions can be operated separately upon movement of the hand operated lever arrangement.

Claim 3 (Currently amended): A dual function handlebar mounted actuator according to claim 1, ~~or claim 2~~ wherein the first function operating means and the second function operating means are mechanically linked together.

Claim 4 (Currently amended): A dual function handlebar mounted actuator according to ~~any of the preceding claims~~ claim 3, wherein said first function operating means is activated by a first action of the user to said lever arrangement and said second function operating means is activated by a second action of the user to said lever

arrangement.

Claim 5 (Currently amended): A dual function handlebar mounted actuator according to claim 3, wherein said first and second actions of the user are respective first and second movements of the user's hand or fingers on or against said lever arrangement.

Claim 6 (Currently amended): A dual function handlebar mounted actuator according to claim 5, wherein the first and second actions include pulling the lever arrangement, pushing the lever arrangement, sliding the lever arrangement, rotating the lever arrangement or any combination of such movements.

Claim 7 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 1, further including first and second actuator members, said first actuator member being arranged to activate said first function when said first operating means is activated and said second actuation means being arranged to activate said second function when said second operating means is activated.

Claim 8 (Currently amended): A dual function handlebar mounted actuator according to claim 7, wherein the first and second actuator members each include adjustment means arranged to enable variation of the point at which operation of said first and second functions occurs.

Claim 9 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding~~

~~claims~~ claim 1, further ~~including~~ comprising adjustors for varying the point at which the combined function is operated.

Claim 10 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 1, further ~~including~~ comprising indication means to indicate to the user when the second function is initiated.

Claim 11 (Original): A dual function handlebar mounted actuator according to claim 10 wherein the indication means provides a tactile indication to the user.

Claim 12 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 1, wherein said lever arrangement includes a lever means having a first portion and a second portion, said lever means being arranged so that movement of the first portion initially operates a first function, movement of the second portion initially operates a second function and movement of the lever means from a point between the first and second portions operates both the first and the second functions.

Claim 13 (Currently amended): A dual function handlebar mounted actuator according to claim 12, wherein continued movement of either the first portion or the second portion of the lever means will respectively result in the operation of the second or the first functions so that the combined function is operated.

Claim 14 (Currently amended): A dual function handlebar mounted actuator according to claim 13, further ~~including~~ comprising a slide member arranged to enable the user's fingers to shift more readily from said first portion to said second portion of the lever means.

Claim 15 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 1, further ~~including~~ comprising a friction adjustor to enable the degree of friction between the second operating means and a portion of the actuator to be adjusted so that the second operating means can be locked in a position whilst the first function operating means is varied.

Claim 16 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 15, wherein the first function is a clutch function and the second function is a brake function.

Claim 17 (Original): A dual function handlebar mounted actuator including a master cylinder actuator and a bias valve, said master cylinder actuator being arranged so that actuation thereof results in a force application to the bias valve which is arranged to operate a first function, a second function or both the first and the second functions.

Claim 18 (Currently amended): A dual function handlebar mounted actuator according to claim 17, wherein the first function is a clutch function and the second function is a brake function.

Claim 19 (Currently amended): A dual function handlebar mounted actuator according to claim 18, further including a bias valve actuator arranged to control a bias valve so as to bias the valve to operate the clutch function, the brake function or the combined clutch and brake function.

Claim 20 (Currently amended): A dual function handlebar mounted actuator according to claim 19, wherein the bias valve includes a piston that is arranged to operate the clutch function and the brake function.

Claim 21 (Currently amended): A dual function handlebar mounted actuator according to claim 20, wherein the bias valve is connected to a clutch arrangement including a clutch port and a clutch return port and a brake arrangement including a brake port and a brake return port.

Claim 22 (Currently amended): A dual function handlebar mounted actuator according to claim 21, arranged so that as the piston of the bias valve is actuated, the clutch function is operated, the brake return port is closed, the brake function is operated and the clutch port is shut.

Claim 23 (Currently amended): A dual function handlebar mounted actuator according to claim 22, wherein following shutting of the clutch port, further travel of the piston of the bias valve will open the clutch return port.

Claim 24 (Currently amended): A dual function handlebar mounted actuator according to claim 23, further ~~including~~ comprising adjustment means arranged to provide a pre-set bias to the bias valve.

Claim 25 (Currently amending): A dual function handlebar mounted actuator according to ~~any one of claims~~ claim 19, ~~to~~ 24 wherein the master cylinder actuator and bias valve actuator are formed as separate lever means which are pivotally connected together.

Claim 26 (Currently amending): A dual function handlebar mounted actuator according to ~~any one of claims~~ claim 19, to 24 wherein the master cylinder actuator and bias valve actuator are formed as a combined lever means.

Claim 27 (Currently amending): A dual function handlebar mounted actuator according to claim 26, wherein said lever means includes a first portion, and a second portion, said lever means being arranged so that movement of the first portion operates said master cylinder actuator, movement of the second portion operates said bias valve actuator and movement of the lever means between the first and second portions operates both the master cylinder actuator and the bias valve actuator.

Claim 28 (Currently amending): A dual function handlebar mounted actuator according to claim 26, wherein the master cylinder actuator and bias valve actuator include as a single lever means, said single lever means being arranged to move in a first direction to operate the

master cylinder actuator and in a second direction to operate the bias valve actuator.

Claim 29 (Original): A dual function handlebar mounted actuator including a lever means, means for operating a first function and means for operating a second function, said first and second operating means being linked so that activation of the lever means in a first direction activates said first function operating means and further activation of said lever means in said first direction to an activation point activates said second function operating means.

Claim 30 (Currently amended): A dual function handlebar mounted actuator according to claim 29, wherein activation of said lever means in a second direction activates said second function operating means and continued activation of said lever means in said second direction activates said first function.

Claim 31 (Currently amended): A dual function handlebar mounted actuator according to claim 29, ~~or claim 30~~ wherein said first function is a clutch function and the second function is a brake function.

Claim 32 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims~~ claim 29, to 31 further ~~including~~ comprising adjustment means for adjusting at least one of the brake function activation point, and said ~~and/or~~ adjustment means for adjusting an activation point of the clutch function.

Claim 33 (Currently amended): A dual function handlebar mounted actuator according to claim 32, wherein the adjustment means ~~includes~~ further comprises an adjustable activating rod connected to the lever means and an adjustor cam.

Claim 34 (Currently amended): A dual function handlebar mounted actuator according to claim 33, wherein the adjustment means is arranged so that the activating rod can be adjusted so that the positioning of the adjustor cam is varied, thereby adjusting the activation point of the brake function.

Claim 35 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims~~ claim 29, to 34 wherein the lever means provides a mechanical link between the first function operating means and the second function operating means.

Claim 36 (Currently amended): A dual function handlebar mounted actuator according to claim 35, wherein actuation of the lever means in the second direction increases the leverage to the clutch function and/or increases free play in the clutch arrangement so as to delay operation of the clutch function.

Claim 37 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims~~ claim 29, to 36 wherein actuation of the lever means in the first direction requires the user to move the lever means in an inwards direction and actuation of the lever means in the second direction requires the user to move the lever



means in a sideways direction either right or left.

Claim 38 (Currently amended): A dual function handlebar mounted actuator according to claim ~~any one of claims 29, to 36~~ wherein actuation of the lever means in the first direction requires the user to move the lever means in an inward direction towards a handlebar and actuation of the lever means in the second direction requires the user to move the lever means in a downward direction.

Claim 39 (Original): A dual function handlebar mounted actuator for use with a vehicle having an engine, said actuator including a hand operated lever means for operating a brake function and a clutch function, means for sensing the R. P. M of the engine and wherein said lever means is arranged so that when the sensed R. P. M is above a first predetermined value movement of a first portion of the lever means will result in operation of the brake function and wherein when the sensed R. P. M. is below the first predetermined value movement of the first portion of the lever means will result in operation of the brake function and the clutch function so as to prevent stalling of the engine.

Claim 40 (Currently amended): A dual function handlebar mounted actuator according to claim 39, wherein initial movement of a second portion of the lever means results in operation of the clutch function independently of the brake function, and that further movement of the second portion of the lever means results in operation of both the clutch function and the brake function.

Claim 41 (Currently amended): A dual function handlebar mounted actuator according to claim 39, ~~or claim 40~~ further including indication means arranged to signal to the user that the brake function has been initiated when the second portion of the lever means is moved.

Claim 42 (Currently amended): A dual function handlebar mounted actuator according to claim 41, wherein the indication means includes a tactile indication to the user.

Claim 43 (Currently amended): A dual function handlebar mounted actuator according to claim 39, ~~any one of claims 39 to 42~~ further including adjustment means arranged to adjust the point at which the clutch function is activated.

Claim 44 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 39 to 43~~ claim 39, further including adjustment means arranged to adjust the point at which the brake function is activated.

Claim 45 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 39 to 44~~ claim 39, further including a brake function control unit arranged to lock on the brake function when the engine R. P. M. is above the first predetermined value.

Claim 46 (Original): A dual function handlebar mounted actuator for a vehicle having an engine including a hand operated lever means and a selector means, said lever means arranged so that when the selector means is in a first

position (C) movement of the lever means in a first direction (A) activates a switch so that a clutch function is operated and continued movement of the lever means in the first direction operates a brake function, said lever means further arranged so that movement of the lever means in a first direction when the selector means is in a second position operates the brake function and will also operate the clutch function when the R. P. M. of the vehicle's engine falls below a predetermined value.

Claim 47 (Currently amended): A dual function handlebar mounted actuator according to claim 46, wherein the selector means includes a spindle arranged for connection to said lever means.

Claim 48 (Currently amended): A dual function handlebar mounted actuator according to claim 47, wherein the spindle is mounted for rotational and sliding movement.

Claim 49 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 46 to 48~~ claim 46, further including adjustment means arranged so that when the selector means is in the second position (B) and the lever means is moved in the first direction the point of activation of the brake function and the clutch function can be adjusted.

Claim 50 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 46 to 49~~ claim 46, further ~~including~~ comprising a control unit, said control unit including a brake solenoid, means for sensing the R. P. M of the engine and a switch arranged

to activate when the R. P. M of the vehicle's engine falls below the predetermined value.

Claim 51 (Currently amended): A dual function handlebar mounted actuator according to claim 50, arranged so that when the R. P. M of the engine falls below a predetermined value the R. P. M switch is activated so as to open the brake solenoid and operate the clutch function to prevent stalling of the engine.

Claim 52 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 46 to 51~~ claim 46, wherein the force required for operation of the clutch function and/or the brake function can be partially or fully provided by operation of a foot pedal.

Claim 53 (Original): A dual function handlebar mounted actuator including hand operated lever means arranged for movement in a first direction (A), said movement serving to operate a first function, said lever means being further arranged for movement in a second direction (B), said movement serving to operate a second function, and wherein the actuator further includes a combined function means arranged so that when said lever means is moved in said first direction to an initiation point said combined function means causes said lever means to also move in said second direction so that both the brake function and the clutch function are operated.

Claim 54 (Currently amended): A dual function handlebar mounted actuator according to claim 53, further including adjustment means arranged to adjust the

initiation point at which the lever means is caused by said combined function means to move in the second direction.

Claim 55 (Currently amended): A dual function handlebar mounted actuator according to claim 53, ~~or claim 54~~ wherein said combined function means is a cam means.

Claim 56 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 53 to 55~~ claim 53, wherein the lever means can also be moved in the second direction upon operation of a foot pedal.

Claim 57 (Currently amended): A dual function handlebar mounted actuator comprising a device having a first function and a second function, wherein the first function is a clutch function and the second function is a brake function.

Claim 58 (Original): A dual function handlebar mounted actuator including lever means arranged for movement in a first direction, said movement in said first direction operating a first function, and wherein when said lever means is moved in said first direction so as to reach a second function initiation point operation of a second function is initiated, said actuator further including means for operating said second function independently of the first function.

Claim 59 (Currently amended): A dual function handlebar mounted actuator according to claim 58, wherein continued operation of said second function operating means

to a first function initiation point will cause operation of the first function.

Claim 60 (Currently amended): A dual function handlebar mounted actuator according to claim 58, ~~or claim 59~~ further including adjustment means arranged to adjust the second function initiation point and/or the first function initiation point.

Claim 61 (Currently amended): A dual function handlebar mounted actuator according to claim 58, ~~any one of claims 58 to 60~~ wherein the first function is a clutch function and the second function is a brake function.

Claim 62 (Original): An actuator arrangement including a lever movable between a first and a second position and a master cylinder having a piston, said lever being arranged so that when it is moved towards said second position said piston is driven from an initial position to thereby increase pressure within the master cylinder and wherein when said lever is released the pressure within the master cylinder is arranged to return the piston towards the initial position, said piston being returned fully to the initial position upon movement of the lever to the first position.

Claim 63 (Currently amended): An actuator arrangement according to claim 62, further including an adjustor member connected between the lever and the master cylinder, said adjustor member being arranged to enable some free play between the movement of the lever and movement of the piston of the master cylinder.

Claim 64 (Currently amended): An actuator arrangement according to claim 62, ~~or claim 63~~ arranged to be operated by a user's hand or by foot operation or a combination thereof.

Claim 65 (Original): A dual function handlebar mounted actuator including a lever means pivotally connected to a mount, said lever means arranged for connection to a first function operating means, actuation means pivotally connected to said mount and arranged for connection to a second function operating means, said lever means and said actuation means being arranged so that when said lever means is pivoted to a first point a first function will be operated and when said lever means is pivoted to a second point the first function and a second function will be operated.

Claim 66 (Currently amended): A dual function handlebar mounted actuator according to claim 65, wherein the actuation means is connected to an operating member which is arranged to pivot the actuation means about said pivot point to operate said second function.

Claim 67 (Currently amended): A dual function handlebar mounted actuator according to claim 65, ~~or claim 66~~ wherein the lever means includes a cam surface against which a follower attached to the first function operating means is arranged to run.

Claim 68 (Currently amended): A dual function handlebar mounted actuator according to claim 67, wherein

the first function operating means includes a first function cylinder and a first function piston and wherein the cam surface of the lever means is profiled so that once said first function is operated further pivotal movement of said lever means will result in substantially no movement of said first function piston.

Claim 69 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 65 to 68~~ claim 65, further including first adjustor means for adjusting the point at which the second function is operated upon pivotal movement of the lever means.

Claim 70 (Currently amended): A dual function handlebar mounted actuator according to claim 69, wherein the first adjustor means includes a threaded member mounted on the lever means having a portion arranged to contact the actuation means so as to initiate pivotal movement of the actuation means.

Claim 71 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 65 to 70~~ claim 65, further including a spindle mounted on the lever means.

Claim 72 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 65 to 71~~ claim 65, further including second adjustor means for adjusting the point at which the first function is operated upon pivotal movement of the actuation means.

Claim 73 (Currently amended): A dual function



handlebar mounted actuator according to claim 72, wherein the second adjustor means includes a threaded member mounted on the actuation means having a portion arranged to contact the lever means so as to initiate pivotal movement of the lever means.

Claim 74 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 65 to 74~~ claim 65, wherein the first function is a clutch function and the second function is a brake function.

Claim 75 (Original): A dual function handlebar mounted actuator including a primary lever, a secondary lever, a pull member, an arm member, first function operating means and second function operating means, said primary and secondary levers being pivotally connected together at a first pivot point and said secondary member and said arm member both being arranged for pivotal movement about a second pivot point, and wherein said pull member is connected between said primary lever and said arm member so that when said primary lever is pivoted about said first pivot point the arm member is caused to pivot about said second pivot point and said first function operating means is caused to operate said first function and when said primary lever is moved in a first direction from a point adjacent the first pivot point the secondary lever is caused to pivot about said second pivot point and said second function operating means is caused to operate said second function.

Claim 76 (Currently amended): A dual function handlebar mounted actuator according to claim 75, further

including a first and second adjustors, said first adjustor being arranged so that when said arm member is caused to pivot about the second pivot point said first adjustor contacts a portion of said secondary lever so as to cause pivotal movement of said secondary lever about said second pivot point, said second adjustor being arranged so that when said secondary lever is caused to rotate the second adjustor will contact a portion of the arm member so as to cause pivotal movement of said arm member about said second pivot point.

Claim 77 (Currently amended): A dual function handlebar mounted actuator according to claim 76, wherein the first and second adjustor are adjustable so that the point at which they contact the respective secondary lever and arm member can be adjusted thereby adjusting the activation points of the first and second functions.

Claim 80 (Currently amended): A dual function handlebar mounted actuator according to ~~any one claims 76 to 79~~ claim 76, wherein said first function is a brake function and the second function is a clutch function.

Claim 81 (Original): A dual function handlebar mounted actuator including a main lever, a first function operating arm and a second function operating arm, said main lever being pivotally connected to said first function operating arm and wherein movement of said first function operating arm in a first direction results in operation of a first function, movement of said main lever in a second direction results in operation of a second function and continued movement of said first function operating arm in said first

direction results in operation of both the first and second functions.

Claim 82 (Currently amended): A dual function handlebar mounted actuator according to claim 81, wherein said first and second function operating arms are arranged for pivotal movement about a first pivot point.

Claim 83 (Currently amended): A dual function handlebar mounted actuator according to claim 82, wherein the main lever is attached to a cam arrangement arranged to contact the second function operating arm so that when the main lever is moved in the second direction the cam arrangement causes the second function operating arm to pivot about the first pivot point and operate the second function.

Claim 84 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 81 to 83~~ claim 81, wherein the first function operating arm includes a cam surface arranged to contact a cam roller arrangement such that movement of the first function operating arm in the first direction causes the cam roller arrangement to operate the first function.

Claim 85 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 81 to 84~~ claim 81, wherein continued movement of the main lever in the second direction results in operation of both the second function and the first function.

Claim 86 (Currently amended): A dual function

handlebar mounted actuator according to ~~any one of claims 81 to 85~~ claim 81, further including a foot control pedal arranged such that activation of the foot control pedal results in operation of the second function.

Claim 87 (Currently amended): A dual function handlebar mounted actuator according to claim 86, wherein activation of the foot control pedal causes the second operating arm to pivot about the first pivot point so as to operate the second function.

Claim 88 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 81 to 87~~ claim 81, wherein the first function is a clutch function and the second function is a brake function.

Claim 89 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims 1 to 61 and claims 65 to 88~~ claim 1, wherein the actuator is arranged so that operation of said first function or said second function can ~~also~~ be activated by a foot operated control.

Claim 90 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims 1 to 16~~ claim 1, wherein the actuator is arranged so that once the first function is operated any additional force applied to the lever arrangement by the user's hand facilitates operation of the second function.

Claim 91 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims 29~~

~~to 61 or claims 65 to 74~~ claim 29, wherein the actuator is arranged so that once the first function is operated any additional force applied to the lever means by the user's hand facilitates operation of the second function.

Claim 92 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims 62 to 64~~ claim 62, wherein the actuator is arranged so that once the first function is operated any additional force applied to the lever by the user's hand facilitates operation of the second function.

Claim 93 (Currently amended): A dual function handlebar mounted actuator according to ~~anyone of claims 75 to 80~~ claim 75, wherein the actuator is arranged so that once the first function is operated any additional force applied to the primary lever by the user's hand facilitates operation of the second function.

Claim 94 (Currently amended): A dual function handlebar mounted actuator ~~according to anyone of claims 81 to 88~~ claim 81, wherein the actuator is arranged so that once the first function is operated any additional force applied to the main lever by the user's hand facilitates operation of the second function.

Claim 95 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 1 to 16~~ claim 1, wherein the first function is a clutch function and once the clutch function is initiated so as to disengage a clutch of a vehicle, any further travel of the lever arrangement requires little or no additional force to

be applied to the lever arrangement by a user.

Claim 96 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 29 to 61 or claims 65 to 74~~ claim 29, wherein the first function is a clutch function and once the clutch function is initiated so as to disengage a clutch of a vehicle, any further travel of the lever means requires little or no additional force to be applied to the lever arrangement by a user.

Claim 97 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 62-64~~ claim 62, wherein the first function is a clutch function and once the clutch function is initiated so as to disengage a clutch of a vehicle, any further travel of the lever requires little or no additional force to be applied to the lever arrangement by a user.

Claim 98 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of claims 75-80~~ claim 75, wherein the first function is a clutch function and once the clutch function is initiated so as to disengage a clutch of a vehicle, and wherein any further travel of the main lever requires ~~little or no~~ minimal additional force to be applied to the lever arrangement ~~by a user~~.

Claim 99 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 98, wherein an overlap between the first and second functions can be varied by a user during

use of a vehicle to which the actuator is attached.

Claim 100 (Currently amended): A dual function handlebar mounted actuator according to ~~any one of the preceding claims~~ claim 99, further including a spindle mounted on the lever.

Claim 101 (Currently amended): A dual function handle bar mounted actuator according to ~~any one of the preceding claims~~ claim 101, including an actuator arrangement including a lever movable between a first and a second position and a master cylinder having a piston, said lever being arranged so that when it is moved towards said second position said piston is driven from an initial position to thereby increase pressure within the master cylinder and wherein when said lever is released the pressure within the master cylinder is arranged to return the piston towards the initial position, said piston being returned fully to the initial position upon movement of the lever to the first position.

Claim 102 (Currently amended): A dual function handle bar mounted actuator according to claim 101, further including an adjustor member connected between the lever and the master cylinder, said adjustor member being arranged to enable ~~some~~ a predetermined amount free play between the movement of the lever and movement of the piston of the master cylinder.